

## WHAT IS CLAIMED IS:

1           1. For use in a base station of a wireless network, a call  
2 control processor comprising:

3           a first state machine capable of performing a call  
4 processing task, said first state machine comprising a queue  
5 capable of storing a plurality of events associated with said  
6 call processing task, each of said plurality of events operable  
7 to cause said first state machine to perform a selected action,  
8 wherein said first state machine is capable of communicating  
9 with a second state machine of said call control processor by  
10 storing at least one event in a queue associated with said  
11 second state machine.

1           2. The call control processor set forth in Claim 1 wherein  
2 said queue of said first state machine is capable of receiving  
3 an incoming event from said second state machine.

1           3. The call control processor set forth in Claim 1 wherein  
2 said first state machine executes said task in response to  
3 receipt of a message retrieved from an operating system (O/S)  
4 queue associated with said first state machine.

1           4. The call control processor set forth in Claim 1 wherein  
2 said first state machine executes said task in response to  
3 receipt of a ping message generated by said call control  
4 processor.

1           5. The call control processor set forth in Claim 4 wherein  
2 said ping message is received on a periodic basis.

1           6. The call control processor set forth in Claim 1 wherein  
2 said first state machine further comprises an array capable of  
3 translating an event associated with said first state machine  
4 into a corresponding event associated with said second state  
5 machine.

1           7.    The call control processor set forth in Claim 1 wherein  
2    said first state machine further comprises a linked list capable  
3    of translating an event associated with said first state machine  
4    into a corresponding event associated with said second state  
5    machine.

1           8.    The call control processor set forth in Claim 1 wherein  
2    said first state machine further comprises an array and a linked  
3    list capable of translating an event associated with said first  
4    state machine into a corresponding event associated with said  
5    second state machine.

1 9. A wireless network comprising:

2 a plurality of base stations capable of communicating  
3 with a plurality of mobile stations located in a coverage area  
4 of said wireless network, each of said plurality of base  
5 stations comprising:

6 a plurality of RF transceivers, each of said RF  
7 transceiver capable of transmitting at least one of voice  
8 signals and data signals in a forward channel to a selected one  
9 of said plurality of mobile stations and capable of receiving at  
10 least one of voice signals and data signals in a reverse channel  
11 from said selected mobile station; and

12 a call control processor capable of controlling said  
13 plurality of RF transceivers, said call control processor  
14 comprising a first state machine capable of performing a call  
15 processing task, said first state machine comprising a queue  
16 capable of storing a plurality of events associated with said  
17 call processing task, each of said plurality of events operable  
18 to cause said first state machine to perform a selected action,  
19 wherein said first state machine is capable of communicating  
20 with a second state machine of said call control processor by  
21 storing at least one event in a queue associated with said

22 second state machine.

1 10. The wireless network set forth in Claim 9 wherein said  
2 queue of said first state machine is capable of receiving an  
3 incoming event from said second state machine.

1 11. The wireless network set forth in Claim 9 wherein said  
2 first state machine executes said task in response to receipt of  
3 a message retrieved from an operating system (O/S) queue  
4 associated with said first state machine.

1 12. The wireless network set forth in Claim 9 wherein said  
2 first state machine executes said task in response to receipt of  
3 a ping message generated by said call control processor.

1 13. The wireless network set forth in Claim 12 wherein said  
2 ping message is received on a periodic basis.

1 14. The wireless network set forth in Claim 9 wherein said  
2 first state machine further comprises an array capable of  
3 translating an event associated with said first state machine  
4 into a corresponding event associated with said second state  
5 machine.

1 15. The wireless network set forth in Claim 9 wherein said  
2 first state machine further comprises a linked list capable of  
3 translating an event associated with said first state machine  
4 into a corresponding event associated with said second state  
5 machine.

1 16. The wireless network set forth in Claim 9 wherein said  
2 first state machine further comprises an array and a linked list  
3 capable of translating an event associated with said first state  
4 machine into a corresponding event associated with said second  
5 state machine.

1 17. For use in a base station in a wireless network, a  
2 method of operating a call control processor comprising the  
3 steps of:

4 retrieving from an internal queue associated with a  
5 first state machine of the call control processor a stored event  
6 capable of causing the first state machine to perform an action;

7 generating from the stored event at least one resultant  
8 event;

9 determining if a second state machine of the call  
10 control processor utilizes the at least one resultant event;

11 translating the at least one resultant event into a  
12 corresponding event associated with the second state machine;  
13 and

14 storing the corresponding event in an internal queue  
15 associated with the second state machine for subsequent  
16 execution by the second state machine.

1 18. The method set forth in Claim 15 wherein the first  
2 state machine comprises an array used to perform the step of  
3 translating.

